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ABSTRACT

The Dutch government has adopted a policy of increasing the number of freshmen while reducing governmental spending. In addition, institutional autonomy is being promoted as an objective. Methods of balancing these policies and objectives are discussed, emphasizing the methods planned or in use in the Netherlands, including: (1) a complex allocation model; (2) selective retrenchment; (3) a limited term of enrollment; (4) privatized loans for scholarships; and (5) a voucher system. Changing the allocation model and limiting the term of enrollment have proved difficult but have met with some success. Changes in the scholarship system and the introduction of a voucher system have not yet been made. Contains 14 references. (Author/KM)

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MAJOR CHANGES IN THE FUNDING SYSTEM FOR HIGHER EDUCATION IN THE NETHERLANDS

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Teresa Karolewski
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ABSTRACT

Expenses in higher education can be divided into two categories: costs made by the universities (and other institutions of higher education) and costs of living of students. The Dutch government has adopted the policy to increase the number of freshmen, but at the same time cut governmental spending. An objective which has recently been added, is the promotion of institutional autonomy.

There are various methods to balance these goals. The present paper analyses some of these methods and describes the actual methods used in the Netherlands. Examples of the latter are a complex allocation model, selective retrenchment, limited term of enrolment, privatized loans for scholarships and a voucher system.

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1. INTRODUCTION

Expenses in higher education can be divided into two categories: costs made by the institution to provide education and costs of living of their students. Who pays who for which expenses is a fundamental question in the funding system in higher education.

In the Netherlands global costs are influenced by the number of students, a factor which in turn depends on the number of freshmen and the average term of enrolment. In the last decades almost every government throughout the world has wanted to increase the number of university freshmen. Since the beginning of the present decade many governments have added another important goal to their policy, i.e. cutting public expenditure. Examples of such cuts in Canada are given by Darling, England, Lang and Lopers-Sweetman (1989), in the United States by Dennison (1987) and in the Netherlands by Brons (1989).

A government has various methods at its disposal to increase the number of freshmen within certain budgetary limits. I will give a frame of reference to classify these methods in chapter 2. After that I will analyze actual methods in use and/or in discussion in the Netherlands.

2. A FRAME OF REFERENCE TO DESCRIBE FUNDING SYSTEMS IN HIGHER EDUCATION

For the purpose of this paper we can distinguish three parties involved in higher education:

- students, the main consumers of educational services;
- institutions of higher education, the main producers of educational services and research;
- the government, an important sponsor of higher education at present.

Referring to these parties in terms of consumers, producers and sponsors has been adopted from Hoeksema (1989).

The producers are institutions for higher education, i.e. universities, colleges, research institutions, institutions for higher vocational education etc. For reasons of convenience I will use the U of "university" to indicate the above institutions in the formulas in this paper. The number of institutions is indicated by the letter j.

Students will be indicated by the letter S, the number of students by the letter i. Note that students are primarily consumers of educational services, not of research. It would be interesting to reflect on the question of who the consumers of research are, but I consider this beyond the scope of this paper. I will concentrate on educational services.

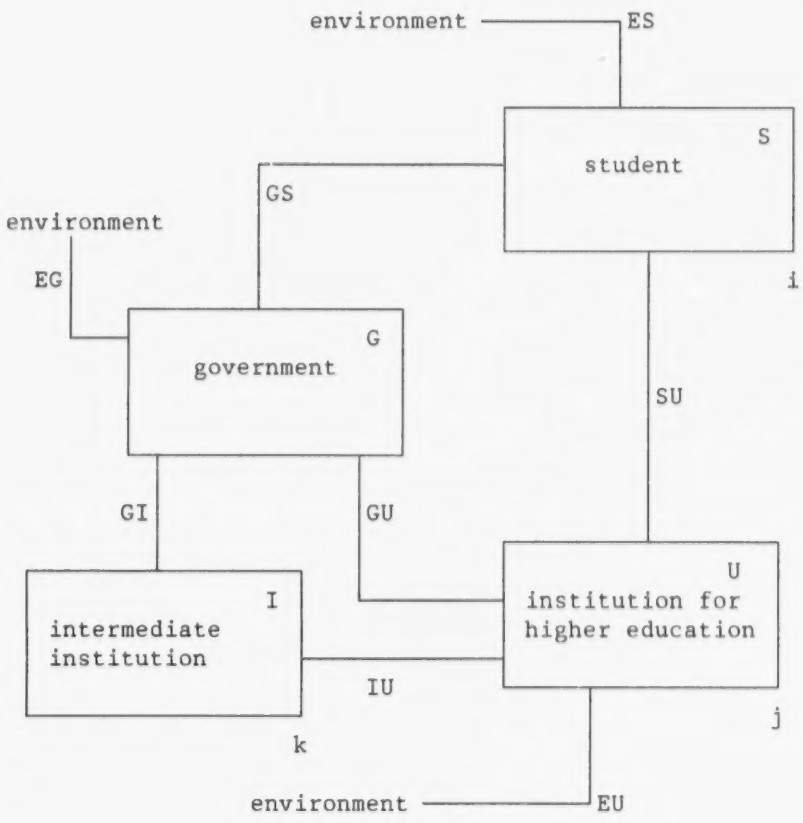
The government will be indicated by the letter G.

The environment - in which every party operates - is indicated by the letter E.

Relations between parties shall be indicated by two letters, for instance GS stands for the relation government/student. Since our interest is in money flows, this relation is expressed in terms of money (Dutch guilders *f* or American dollars $). These relations can be rather complex. For instance: Dutch scholarships are partly a donation (GS_d), partly a loan (GS_l). In certain circumstances a scholarship may affect the taxes to be paid to the government; this could be termed a negative donation.

The money flow from the government to the institutions for higher education (GU) can be organised through an intermediate organization (I). Money for research is often allocated in this way. The number of intermediate organizations is indicated by the letter k.
Figure 1 shows the parties concerned and their respective relations.

Figure 1. The parties involved in higher education and the financial flows between them.



A flow of money goes from the party indicated by the first letter to the party indicated by the second letter. So

$$GU = -UG$$

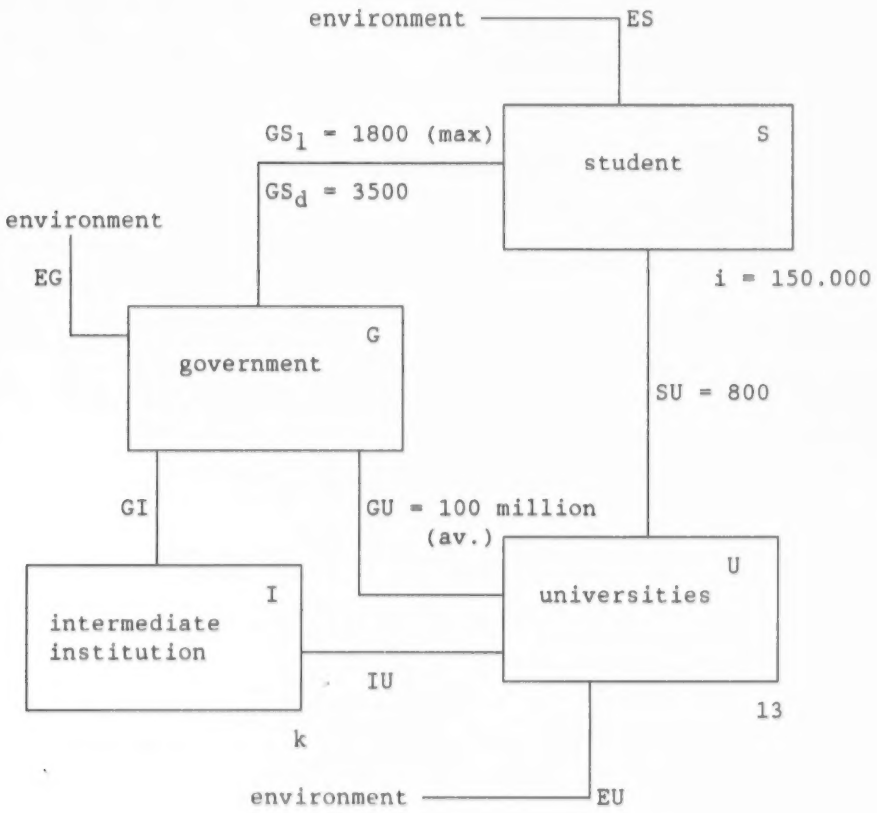
An equation can be formulated for every party for a certain period. First we must define the state of the party. In our financial framework we can restrict this state to the capital C (debts are negative capital). For a student the equation between point of time t and point of time t+1 is

$$C_S(t+1) - C_S(t) = GS(T) + ES(T) - SU(T)$$

where T means the period from t to t+1.
ES(T) contains different elements like (negative!) cost of living, gifts from parents, salaries and bank loans.
The equations for G, I en U are similar, on the understanding that all relevant students and/or all relevant institutions have to be added up.

The above equation is a useful instrument for a quick impression of money flows in higher education. Figure 2 gives figures which apply to Dutch universities.

Figure 2. Money flows in American dollars relative to Dutch universities (one dollar is about two Dutch guilders).



The figure can be used for international comparison or for analysis in time. It is of course more practical to use a table to compare more than one system.

An aspect worth mentioning is the existence of complex relations between different flows. In the Dutch case a clear example is the fee (SU) students pay. It is the government who determines this fee for all universities and all disciplines.

Changing the fee implies changing both GS and GU!

In the Dutch scholarship system the maximum amount of GS a student can get is derived from a kind of normative budget, in which the fee is an important element! In the allocation system for universities GU is determined by a complex set of formulas, including a deduction of estimated student fees. So the main effect of changing the fees is letting more or less money circulate between the parties.
Upon careful analysis, secondary effects become visible. Not every student receives the maximum amount of GS and there are certain differences between estimated fees and actual (collected) fees.

3. THEORETICAL CONSIDERATIONS ON RETRENCHMENT

My starting point in the introduction was the government's policy to increase participation in higher education within certain budgetary constraints.
Total governmental costs in period T can be presented in the formula

$$\sum_i GS + \sum_j GU + \sum_k GI$$

where i indicates the number of students, j the number of institutions for higher education and k the number of intermediary institutions. The flow through an intermediary organization is generally research oriented and independent of the number of students. If it is not, an analysis for GI can be made similar to the one for the direct flow GU. We will therefore restrict our analysis to the first two elements of the above formula.
At a first glance costs can be decreased by decreasing i, GS, j and/or GU. The government examined all options. Chapter 4 deals with the

reduction of j and GU, chapter 5 the reduction of i and chapter 6 the reduction of GS.

From a theoretical point of view the most interesting option for the Dutch situation is an attempt to reorganize the relations between money flows by the introduction of a voucher system. This option will be discussed in chapter 7. It is one of a family of policies designed to increase the efficiency and effectiveness of the higher education system. When such a policy is succeeding, the government can decrease the flow GS and/or the flow GU. More examples of this family of policies are mentioned by Ferris (1988).

It should be noted that the legitimacy of the formula presented above can generate some discussion. The question is if GS must be considered as teaching costs or as social security costs. Two arguments tend to point to the latter:

- the introduction of GS_d was financed by the abolition of the family allowance for students and of tax benefits for their parents;
- to a certain extent scholarships and unemployment benefits can be considered as communicating vessels.

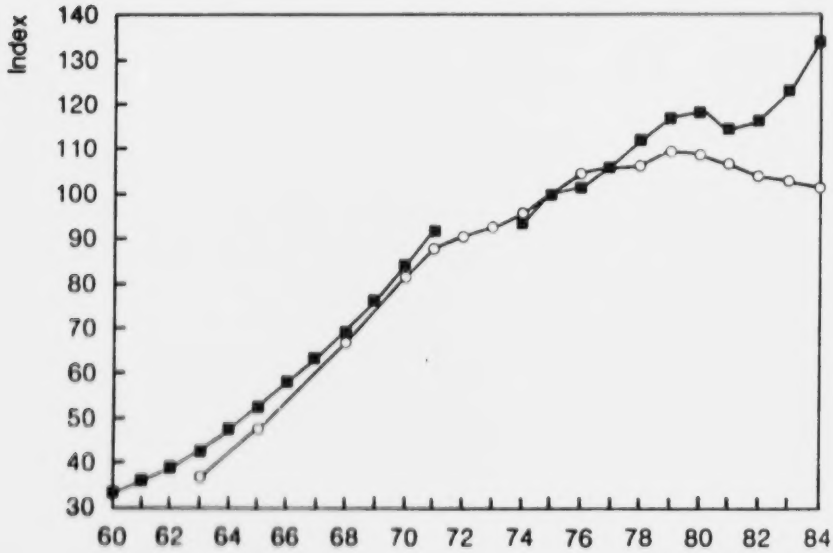
Following this train of thought it is clearly the duty of the minister of social work and employment to support his colleague of education and science, whenever more students claim scholarships.

Though this opinion is arguable, it is not a political reality in the Netherlands. It is therefore inevitable to take GS into consideration in the present paper.

4. CHANGING THE ALLOCATIONSYSTEM: THE CHEESE-SLICER OR LEMON-SQUEEZER METHOD

In 1977 the government decided to freeze the global budget for universities (Σ GU), and not to limit the number of freshmen, with a few exceptions (medicine, dentistry and wherever there is a temporary capacity problem). The effect of these measures is that in the last decade costs per student decreased by 40 %. See figure 3.

Figure 3. Student enrolment and actual expenditure in Dutch universities, indexed, 1975 = 100.



■ enrolled students

o actual expenditure

Source: Groot (1988, p. 68).

Such severe cuts as were effected in the Netherlands are not unique. In the introduction I referred to similar cuts in the United Kingdom, Canada

and the U.S.A.

In the Netherlands the cuts are implemented by means of a complex planning system and an even more complex - formula based - funding model (staffing-money-model). I reported on the complexity of this system in an earlier paper (Brons, 1989).

The government put the model into practice and adapted it in those cases where model-results exceeded the available budget.

Today the universities and even the government are convinced that this method can no longer be used without a substantial deterioration of the quality of education and that a less complex funding system must be introduced. To this end universities developed a model with basically one formula: the number of students multiplied with a fee per student, without differentiating personnel costs versus material expenditure. There are three different fees per student, one for arts and social sciences (about $ 2600 per student), one for science and medicine ($ 6500) and one for technology and agriculture ($ 7100).

In the end however universities could not agree on a reallocation of funds (or how to avoid it). Towards the end of March the minister of education and science presented a set of starting points for a simple system in the near future. On April 18th the minister and the universities agreed on these starting points. Next step will be a recommendation by an independent office to develop an allocation system based on these starting points.

Even more important than the simplification of the model is putting an end to retrenchment by either the cheese-slicer or the lemon-squeezer method. The relation between available funds and tasks to be carried

out must be restored. If it is impossible to increase the funds, the only alternative is limiting the tasks (in terms of enrolment and/or research capacity).

Both the universities and the minister are convinced that budget cuts for universities have reached an absolute ceiling. Until now the minister of finance has had a different opinion. In May the universities will start a campaign to influence public opinion leaders, preceding the elections next year and the programme of the new government.

So far this chapter has dealt with Σ GU. In the previous chapter I also mentioned the number of universities (j). The Dutch government seriously considered economizing by closing down a university. In the formulas of the allocation model this would mean a real economy, because in these formulas we find constant amounts for a university and for each discipline at a university. But since Dutch students hate traveling too far (a distance of over 30 miles is considered far!), the result would be a decrease in student numbers, and that is against government policy. Another decisive argument against closing down a university is the creation of strong regional lobbies the minute rumours of a possible closure start circulating.

Closing faculties is a less drastic measure which was taken by the government on two occasions. The first operation started in 1982, the second in 1986. In the first operation a budget cut of 8 % was imposed. About 4 % of this cut related to closure of faculties or smaller units. In the second operation the cut amounted to 4 %, but there were no closures - apart from one and a half faculty of dentistry. Reports in English on the first operation were written by Rosenberg (1983), Acherman (1984) and

Ligthart & McDaniël et al. (1986). Acherman (1988) reported on the second operation also.

In the scope of this paper both operations can be seen as yet another way to save money in the GU flow, besides rough changes in the formulas. As a matter of fact they were afterwards translated into changes in the formulas.

So far we have dealt with universities only in this chapter, but there are certainly interesting developments in the non-university sector as well. I will confine myself to refer to papers from Goedegebuure & Vos (1988) and from Spee & Van Brouwershaven (1988).

5. LIMITING THE TERM OF ENROLMENT: THE PRESSURE COOKER METHOD

In the late sixties the Dutch government realized that increasing the number of freshmen without diminishing the average term of enrolment (about eight years), would be very expensive. In our frame of reference the number of students i can be decreased without changing the number of freshmen. Several white papers were published and discussed, most of them with two objectives:

- shorter programs, which were five years for most curricula, but six, seven or even more for some specialized ones.
- shorter term of enrolment. The Netherlands have always had a discrepancy between the length of curricula and the actual years students are enrolled at a university.

After more than ten years of discussion, a law was passed in 1982 introducing a dual phase structure, limiting curricula to four years

and enrolment to six. After finishing a program in the first phase only 30% of the students could proceed to the second phase. One year after the introduction of the law a new policy was introduced: the second phase is organised by the institution itself, for which students pay a fee covering all expenses. The institution was entitled to an initial subsidy for the first years of a new program under certain conditions (not previously specified).

Due to the last change there was hardly any flow of money in GU in the second phase. In the formulas used to calculate the allocation of funds to the university, the number of students i was simply replaced by a smaller number, calculated on a normative basis related to the limit of four years for the curricula. This approach prompted universities to execute the new policy.

For the flow of money to the students the policy was quite clear. The flow GS did not change immediately, but there was a drastic decrease in the number of years a student could benefit from such a flow of money. Moreover enrolment in the second phase would only be possible if a future employer was willing to invest in a particular student.

The law was implemented in 1982, which meant the limitation to six years would not have any consequences until 1988. But in 1987 it became clear that a lot of students would come into trouble. Changing a tradition is even more difficult than changing a law, and the latter took more than ten years. The government introduced a new law in 1987. Almost without a transition period student fees would double after the six years and there would be no more scholarships. The six year limit was not only applied to university curricula, but also in higher vocational education. If a graduate from higher vocational education wishes to continue his

education at a university, the years spent in higher vocational education are included in the six year limit!

There is not much resistance to this six year limit as a principle, but universities did oppose the proposed law, which would enable the government to realise a budget cut of 165 million Dutch guilders in 1988. Such a cut was only possible without transition period. Student-unrest, changes enforced by parliament and a sentence in court (government versus students, lost by the government, but recently won on appeal) caused a lot of delay and quite a long transition period. The universities were cut to reach the retrenchments. So the proposed limitation of the number of students i will not be effected at short notice, in the meantime the "traditional and trusted" cuts of university funds will continue (flow GU).

6. REORGANISING SCHOLARSHIPS: THE SLIMMING DIET

Application of the methods as described in the previous chapters for reducing government expenditure in higher education is not new. Quite recently a new method has been developed, focussing on the scholarship system. In the Netherlands a student gets a basic grant of about 600 Dutch guilders ($ 300) each month. On top of this grant he/she is entitled to an additional grant for specific expenses related to his/her study and for travelling expenses. Depending on the parents'income (or his/her partner's) he/she can get a government loan of about 200 Dutch guilders ($ 100). If the financial situation of a student's immediate environment is very uncertain, he/she can get a maximum additional grant of about 100 Dutch guilders ($ 50). For more information on the Dutch

scholarship system see the biannual plan of the ministry of education and science (MO&W, 1988).

The scholarship system is about as expensive as operating costs of universities, which means that changes in this system can have important effects on the total financial situation. One of the main problems is the fact that the actual scholarship system has only recently been implemented, even before the central database was ready to handle the 500.000 students (university, non-university and secondary schools) and their frequent mutations. The result was administrative chaos. A lot of students did not get any money at all, there was a growing mountain of unanswered post and getting the scholarship service on the phone was only possible for one in thousand callers.

The purpose of the change in the system was simplification and at the same time a reduction in government expenditure.

One of the most sympathetic elements in the new system was a public transport season-ticket for all students. The normal price for such a ticket (entitling to free public transport throughout the country) is $ 150 a month, but the basic grant for students would only be cut by $ 30. The government pays $ 180 million to the public transport companies, but saves $ 270 by the monthly $ 30 cut and by no longer having to pay specific travelling expenses. The latter means an important simplification of the administrative process.

The elaboration of both elements made two problems visible: the number of available trains and buses on the one hand and the problem of producing and distributing 500.000 season-tickets in only a few weeks' time. (Note: In the winter of 1988 one minister and one secretary of state even had to resign because of production problems with the Dutch

passport).

At the time this paper is written (April 1989), the impression is that these problems can be solved. But there is a principal problem: the proposal affects the freedom of the student to spend his original grant in his own way. This problem causes some delay in the political decision process. So it is too early to safely say that the Netherlands have found a creative way of saving money by decreasing GS without serious damage to the financial situation of students, at the same time simplifying administrative processes and giving people an added incentive to use public transport.

This was the sympathetic side of the reform. A less sympathetic element is the "privatization" of the additional loan. It is not the government but private banks which provide this loan. I must first point out that Dutch theories on government financing consider both loans and grants as government expenditure. Thus, the privatization of loans is a way of saving money!

Since the summer of 1988 until quite recently negotiations have taken place between various bank institutions and the government. An important point in the debates has been the "social risk", the amount of money a former student cannot repay, for reasons of unemployment or low salary. This risk was calculated between 4 % and 9 % of the total amount of loans.

In February 1989 it became clear that the banks were unwilling to cover this risk: in their view that risk is the responsibility of the government. Negotiations have stopped, (at least for the time being) bringing an end to the privatization adventure.

The suggestion to abolish the additional grant for students with an

uncertain financial environment was rejected by parliament. Such a reform would imply a considerable simplification of the administrative process. The government would save less than $ 50.

The failure of privatization means the government is now looking for other methods like lowering the age limit for students to obtain a scholarship from 30 to 27 years. Such suggestions have created a growing tense atmosphere between the government and student-organizations.

7. THE VOUCHER SYSTEM: THE DRIVE IN

Theoretically speaking the most interesting idea to come up in the Netherlands is surely the idea of a limited right to be educated, to be implemented by some kind of "voucher system". A student can buy education and a scholarship with a voucher. When he has run out of vouchers, he can buy education with real money. Universities get money from the government for every voucher used.

The idea of a voucher system is not new (it was first brought forward by Thomas Paine in 1790), but so far it has never been implemented nation-wide as in the present Dutch proposals. An important element is the idea that students get a certain power over universities: they can decide to use their voucher here or there, now or later. As a consequence universities can become more independent from the government.

The ultimate consequence of this idea is that every citizen (for instance on his 18th birthday) gets an amount of money enabling him to get an education for a period of six years (university expenses included). In such an approach the flow GU from government to university does not exist for educational services. It is obvious that both the government

and the universities are very cautious in actually putting this approach into effect. Certainly the human capital theory says that for young people to invest in an education is a very wise decision, but who can guarantee that young people will act according to such a theory and not buy a nice car?

The Dutch government proposed a rather complex version of the voucher system (MO&W, 1988). A complicated credit-point system for all higher education programs was developed with additional incentives (more credit points) for "fast" students.

Discussion of this system raised a lot of objections. The proposed system was very complex and therefore required an elaborate central information system. As a matter of fact the flow GU does not disappear, but becomes relative to the number of vouchers used instead of the numbers of students. Most objections focussed on the complexity of the proposals. The most fundamental criticism came from the Advisory Council for Higher Education (ARHO, 1988).

A year ago the government decided not to implement the system as proposed, but commissioned a study into the relation between a voucher system and a limited right to an education and to unemployment benefits for unemployed youngsters. This should not have take long, but as yet no results are available. The study is performed by at least two ministries cooperatively, and I am sure the reader will agree that cooperation in government matters is not that simple.

It is a great pity that there is no real progress in this discussion. Within the policy to make institutions for higher education more autonomous, the notion of funding them through the flows GS and SU instead of through the flow GU is a very interesting one.

It is an intriguing thought whether in the near future a system can be developed, resulting in a real change in the financial structure between government, students and universities.

8. CONCLUSION AND FURTHER RESEARCH

The present paper has tried to present a frame of reference to describe actual and theoretical flows of money between government, students and institutions for higher education.
It is an adequate framework to describe changes in these flows in the Netherlands.
I have analyzed 4 ways of changing these flows in the Netherlands. Changing the allocation model for universities and limiting the term of enrolment have proved difficult but have met with some success. Changes in the scholarship system and the introduction of a voucher system have not actually been implemented until now.

Further research in this field will concentrate on:

- the actualization of data relative to changes in the Dutch situation;
- an international comparison and the addition of theories from literature;
- the selection of criteria as instruments to judge possible configurations of flows of money between the parties involved.

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